



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,202	03/26/2004	Robert B. Collier	01029.0010U1	2898
23506	7590	06/26/2006	EXAMINER	
GARDNER GROFF SANTOS & GREENWALD, P.C.			THOMAS, JAISON P	
2018 POWERS FERRY ROAD			ART UNIT	
SUITE 800			PAPER NUMBER	
ATLANTA, GA 30339			1751	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,202

Applicant(s)

COLLIER ET AL.

Examiner

Jaison P. Thomas

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39, 43, 48, 52, 58 and 62 is/are allowed.
- 6) ☒ Claim(s) 1-24, 26-38, 40-42, 44-47, 49-51, 53-57, 59-61 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/26/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13, 15-24, 26-38, 40-42, 44-47, 49-51, 53-57, and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knowlton et al. (US Patent No.5073442) in view of Derstadt et al. (US Patent No. 4116885).

Knowlton teaches a composition for improving soil and stain resistance on fabrics using a "variety of combinations of sulfonated resin, sulfonated phenolic compounds, compounds of sulfonated phenolics and aldehydes, fluorochemicals, modified wax emulsions ..." (Abstract). The wax emulsions are further described as "[p]araffinic wax emulsion, microcrystalline wax emulsion, metalized wax emulsion such as aluminum salt/wax emulsion or zirconium salt/wax emulsion, modified fatty amide dispersions, anionic resinous wax emulsion such as melamine wax emulsion" (Column 2, lines 1-7). The types of phenolic resins disclosed include condensation products of formaldehyde with several different types of compounds disclosed in Column 1, lines 45-52. Examples of the composition include water as a solvent (Column 4, lines 40-48). Methods of application of the composition and the resulting carpet article are disclosed in Example 1 (Column 6, lines 15-23).

Knowlton is relied upon as disclosed above, however, Knowlton does not teach the use of zeolites or polyester in the composition.

Derstadt teaches a detergent composition for cleaning fiber compositions wherein polyester is used as a soil-release agent (Column 1, lines 7-10). The polyester is further described as a copolymer of polyethylene terephthalate and polyethylene oxide terephthalate wherein the ratio of monomers is 50:50 to 90:10 in favor of the PET (Column 4, lines 47-49). The compositions can also include nonionic and anionic sulfonated surfactants (Column 5, lines 45-55 and Column 6, lines 50-60), wherein the sulfonated surfactants are all in the form of sodium salts (Example I, Column 11, lines 20-23). The composition also contains sodium aluminosilicates, well known in the art as zeolites (Column 10, lines 12-26) having a unit cell structure silicon, aluminum and sodium oxides (Column 10, lines 15-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the composition of Knowlton with that of Derstadt as both compositions are directed towards fabric treatment designed to improve soil-release properties.

With respect to the glass transition temperature limitations of the polyester of instant Claims 1, 4, 5, and 40 the covalent bonding limitation of instant Claim 7 the examiner respectfully submits that the prior art would reasonably meet the claimed limitation. Specifically, Derstadt teaches similar materials used in similar situations to those required by the instant claims and therefore would reasonably possess the glass transition temperatures and covalent bonding characteristics required.

With respect to the disodium alpha olefin sulfonate limitation of instant Claim 21, and the weight limitations of the polyester, wax-modified polymer, zeolites, surfactants, and metal oxides of instant Claims 6, 12, 15, 16, 22 and 26 it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the sulfonate surfactants of Derstadt through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the hydrazine and amine absence limitations of instant Claims 30, 31, 36, 37, 41, 45, 46, 50, 55, 56, and 60, the references are silent with respect to the presence of hydrazine or an amine particle.

With respect to the product by process limitations of instant Claims 40-42, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knowlton and Derstadt as applied to claims 1-13, 15-24, 26-38, 40-42, 44-47, 49-51, 53-57, and 59-61 above, and further in view of Carter et al. (US Patent Application Publication 2002/0142937).

Knowlton and Derstadt are relied upon as discussed above, however, neither reference teaches the use of mordenite as a zeolite.

Carter teaches of cleaning and deodorizing compositions for fabrics wherein zeolites are used in a deodorizing composition. "Suitable zeolites ... include ... ZSM-5 ... mordenite ... " (pg. 3, para. 0040).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the zeolites Knowlton/Derstadt with the zeolites of Carter as because the substitution of art recognized equivalents as shown by Derstadt is within the level of ordinary skill in the art.

Allowable Subject Matter

4. Claims 39, 43, 48, 52, 58, and 62 are allowable over the prior art made of record. The art does not teach nor reasonably suggest the use of activated carbon with the wax modified polymers and polyesters which are required by the instant claims.

5. Claim 25¹⁵₁ is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The art does not teach nor reasonably suggest the use of a zinc oxide with the wax modified polymers and polyesters which are required by the instant claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The references are considered cumulative to or less material than those discussed above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas

Application/Control Number: 10/811,202

Page 7

Art Unit: 1751

Examiner

6/14/2006



Lorna M. Douyon

LORNA M. DOUYON
PRIMARY EXAMINER